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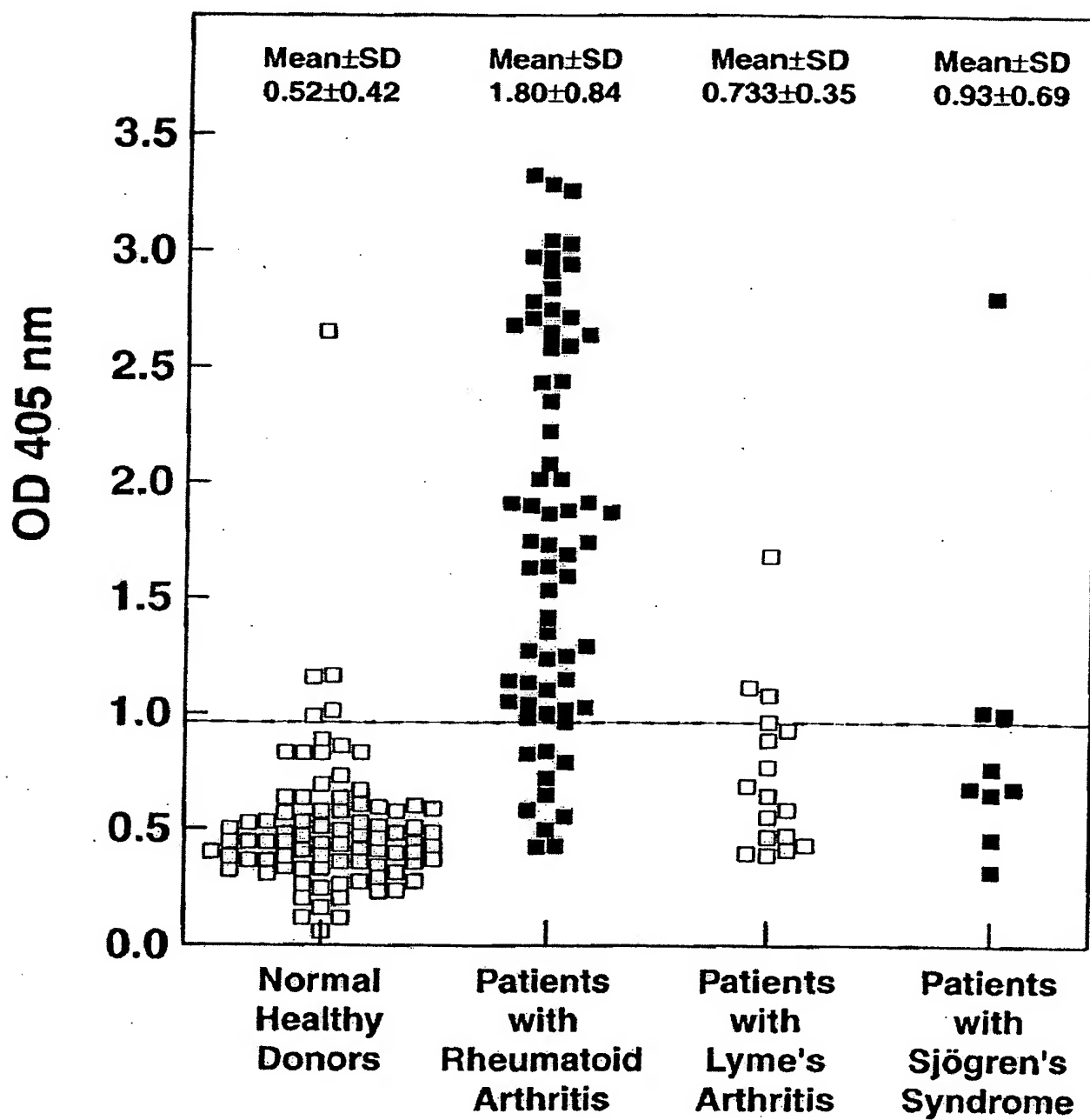


FIG. 1A

TITLE: AUTOANTIBODIES TO GLUCOSE-6-PHOSPHATE ISOMERASE AND THEIR  
PARTICIPATION IN AUTOIMMUNE DISEASE  
INVENTORS NAME: Henrik Ditzel et al.  
SERIAL NO.: 09/828,708  
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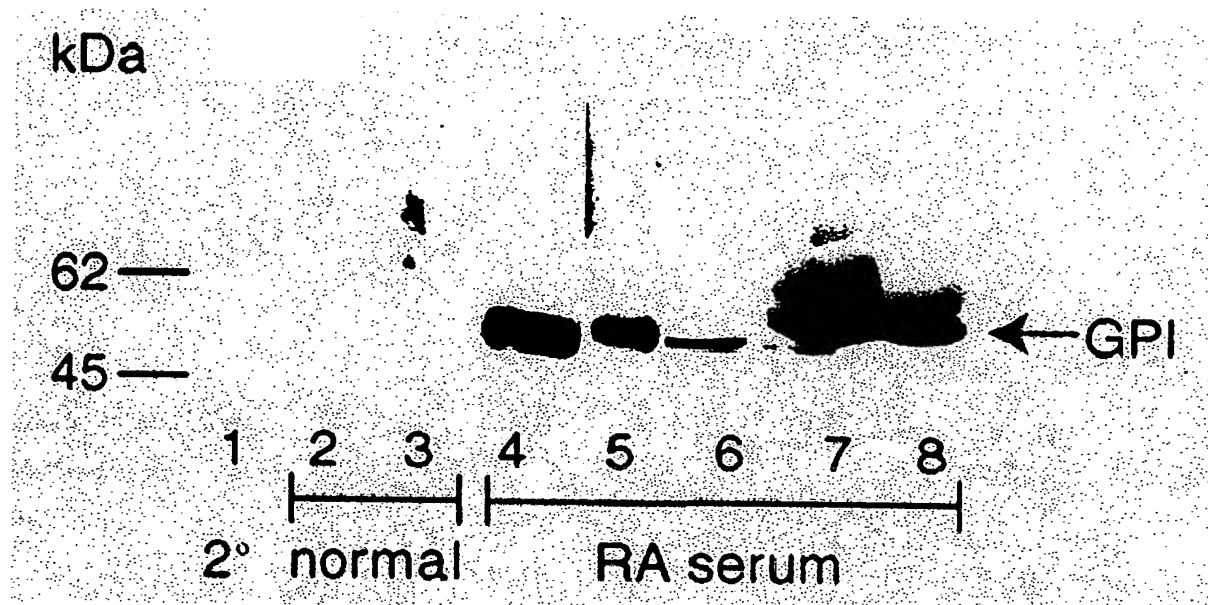


FIG. 1B

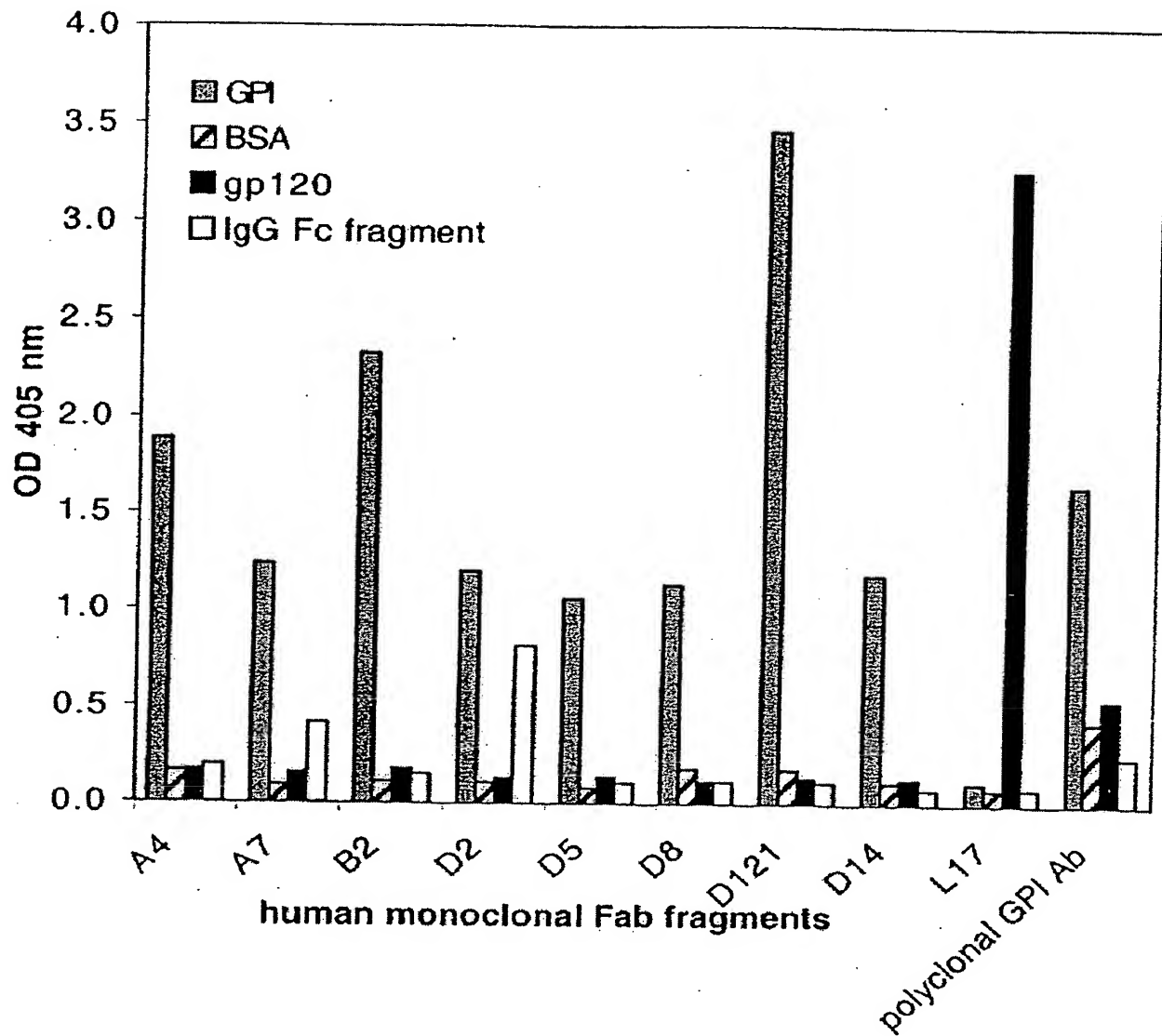


FIG. 2

Light Chain Variable AA Sequences

<u>Name</u>	<u>SEQ ID</u> <u>NO.</u>	<u>FR1</u>	<u>CDR1</u>	<u>FR2</u>
A4	1	PDSLAVSLGERATINC	KSSQSVFYTSNNKNYLA	WYQQKPGQPPKLLIY
D2	2	PSFLSASVGDRTITC	RASQGISSYLA	WYQLKPGKAPKLLIY
D121	3	PGTSLSPGERATLSC	RASQSVSSSYLA	WYQQKPGQAPRLLIY
B2	4	PDSLAVSLGERATINC	KSSQSVFYTSNNKNYLA	WYQQKPGQPPKLLIY
D14	5	PGTSLSPGEGATLSC	RASQSVSSSYLA	WYQQRPGQAPRLLIY
D5	6	PGTSLSPGEGATLSC	RASQSVSSSYLA	WYQQKPGQAPRLLIY
A7	7	PGTSLSPGERVTLSC	RASQSVSSSYLA	WYQQKPGQAPRLLIY
<u>Name</u> <u>cont'd</u>	<u>CDR2</u>	<u>FR3</u>	<u>CDR3</u>	<u>FR4</u>
A4	WASTRES	GVPDRFSGSGGTDFLT	TISSLQAEDVAVYYC	FGQGTKLEIKRTVA
D2	AASTLQS	GVPSRFSGSGGTDFLT	TISSLQPEDFATYYC	FGGGAKVGRRTVA
D121	GASSRAT	GIPDRFSGSGGTDFLT	TISRLEPEDFAVYYC	FGQGTKVEIKRTVA
B2	WASTRES	GVPDRFSGSGGTDFLT	TISSLQAEDVAVYYC	FGQGTKLEIKRTVA
D14	GASSRAT	GIPDRFSGSGGTDFST	TISSLQPEDTGTYYC	FGQGTRLEIKRTVA
D5	GASSRAT	GIPDRFSGSGGTDFLT	TISRLEPEDFAVYYC	FGQGTRLEIKRTVA
A7	GASSRAT	GIPDRFSGSGGTDFLT	TISRLEPEDFAVYYC	FGQGTKVEIKRTVA

FIG. 3AL

TITLE: AUTOANTIBODIES TO GLUCOSE-6-PHOSPHATE ISOMERASE AND THEIR PARTICIPATION IN AUTOIMMUNE DISEASE

INVENTORS NAME: Henrik Ditzel et al.

SERIAL NO.: 09/828,708

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# Heavy Chain Variable AA Sequences

Name	SEQ ID NO.	FR1	CDR1	FR2	CDR2	FR4	VH gene
A4	8	GGGVVQPGRSCLKSAAAGFTFS	SHGSH	WVRQAPGKGLEWVA	LLSSDGSNKFYIESVKG		
D2	9	.....AW..LR..V.....	..TM.	.....	..TM.	WGQGTIVTVSS	VH3
D121	10	.....R.....	.YTF.	.....	VI.Y..NK.Y.AD....	.....	VH3
B2	11	GAEVRKPGTSVRISCRASGNTFT	CHHII	WVRQAPGQGLQWMG	RINPTGGVSLAQSFQD		
D14	12	GGGLVQPGGSLRLSCATSGFIEN	SYAMN	WVRQAPGKGLEWVS	RISGNSGSTFYADSVKG		
D5	13	GPGLVRPSQTLTLTCPVSPGSIK	GDSYFWS	WVRQPVGKGLEWIG	RIYGRGTTNINRVFGS		
A7	14	GAEVKKPGSSVKVSCRASGGTFS	RYAIS	WVRQAPGQGLEWMG	GIIPPFPGPVNYAQKFQG		
A4		RFTISKDNSKNTLYLQMNSLRIDDTAVYYCAI	SLVGTTAFNY			WGQGTIVTVSS	VH3
D2		.....R.....LS...PE.....TN	.E..A...D.			.....	VH3
D121		.....VE.....	.I.....				VH3
B2		RVSLTRDRSSNTVFLELSGLTEEDTALYFCAR	PRFNMIREPLDL			WGQGTIVTVSS	VH1
D14		RFTISRDNKNTAFLRMNSQRAEDTAVYYCAK	DLSSGAYYYYGMDV			WGQGTIVTVSS	VH3
D5		RVSMVSVDMSRSQFFLELRDVTAAADTAVYYCAR	DKGSEYSYFDP			WGQGTIVTVSS	VH4
A7		RVTITADDSTNTAYMGLSSLRSRSGDTAVYYCAR	VAYDGSYYNNIPKIYYISYMD			WGKGTIVTVSS	VH1

FIG. 3AH

TITLE: AUTOANTIBODIES TO GLUCOSE-6-PHOSPHATE ISOMERASE AND THEIR  
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 SERIAL NO.: 09/828,708

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Name	SEQ ID NO:	FR1	CDR1	FR2	CDR2
A4	8	GGGVVQPGRSLKLSCAASGFTFS	SHGSH	WVRQAPGKGLEWVA	LLSSDGSNKFYIESVKG
D2	9	.....AW..LR...V.....	..TM.		..TM.
D121	10	.....R.....	.YTF.		VI.Y..NK.Y.AD.....
DP-46		.....R.....	.YAM.		VI.Y.....AD.....
B2	11	GAEVRKPGTSVRISCRASGNTFT	GHHIH	WVRQAPGQGLQWVG	RINPTGGVSLAQSFQD
DP-7		....K...A..KV..K...Y...	SYTMH	.....E...	I...S..ST.Y..K..G
D14	12	GGGLVQPGGSLRLSCATSGFIFN	SYAMN	WVRQAPGKGLEWVS	RISGNSGSTFYADSVKG
VH26		.....A...T.S	....S		A...SG...Y.....
D5	13	GPGLVRPSQTLTLTCLPVSPPGSIK	GDSYFWS	WVRQPVGKGLEWIG	RIYGRGTTNRYNRVFGS
IGHCAK		.....K.....T..G...S	SG..Y..	.I...A.....	...TS.S....PSLK.
A7	14	GAEVKKPGSSVKVSCRASGGTFS	RYAIS	WVRQAPGQGLEWVG	GIIPFPFPGPVNYAQKFQG
VH1-69		.....K.....	S.....	.....	.....I..TA.....

FIG. 3B

TITLE: AUTOANTIBODIES TO GLUCOSE-6-PHOSPHATE ISOMERASE AND THEIR PARTICIPATION IN AUTOIMMUNE DISEASE

INVENTORS NAME: Henrik Ditzel et al.

SERIAL NO.: 09/828,708

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Name cont'd	FR3	CDR3	FR4	VH gene
A4	RFTISKDNSKNTLYLQMNLSLRIDDTAVYYCAI	SLVGTTFATNY	WGQGTLLVTVSS	VH3
D2	...R...LS...PE...TN	.E..A...D.	.....	VH3
D121	.....VE.....	.I.....	.....	VH3
DP-46	...R.....AE.....R			
B2	RVSLTRDRSSNTVFLELSGLTEEDTALYFCAR	PRFNMIREPLDL	WGQGTVVTVSS	VH1
DP-7	..TM...T.TS..YM...S.RS....V.Y...			
D14	RFTISRDNKNTAFLRMNSQRAEDTAVYYCAK	DLSSGAYYYGMDV	WGQGTVVTVSS	VH3
VH26	.....LY.Q...L.....			
D5	RVSMVDMRSRQFFLELRDVTAAQTAVYYCAR	DKGSEYSYFDP	WGQGIIVNVFS	VH4
IGHCAK	..TI...T.KN..S.K.SS.....			
A7	RVTITADDSTNTAYMGLSSLRSGDTAVYYCAR	VAYDGSYYNNI	WGKGTVVTVSS	VH1
VH1-69	.....K..S....E.....E.....	PKIYYSYMDV		

FIG. 3B Cont'd



Clone	Closest Germline	% amino acid homology	% nucleotide homology	R/S ratio FRs	R/S ratio CDRs
A4	DP-46	86	89	6/6:1.0	12/5:2.4
D2	DP-46	87	92	8/6:1.3	4/5:0.8
D121	DP-46	91	95	2/4:0.5	7/0:>7.0
B2	DP-7	67	79	20/17:1.2	14/5:2.8
D14	VH26	87	93	7/3:2.3	5/2:2.5
D5	IGHCAK	73	81	17/16:1.1	13/4:3.3
A7	VH1-69	90	94	7/2:3.5	5/0:>5.0

FIG. 3C

TITLE: AUTOANTIBODIES TO GLUCOSE-6-PHOSPHATE ISOMERASE AND THEIR  
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SERIAL NO.: 09/828,708

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CDR's Heavy Chain

SEQ ID NO:	CDR1	SEQ ID NO:	CDR2	SEQ ID NO:	CDR3
15	SHGSH	22	LLSSDGSNKFYIESVKG	29	SLVGTTFNFY
16	.TM.	23	.IFY.....Y.AD....	30	.E..A...D.
17	.YTF.	24	VI.Y..NK.Y.AD....	31	.I.....
18	GHHIH	25	RINPTGGGVSLAQSFQD	32	PRFNMIREFPLDL
19	SYAMN	26	RISGNSGSTFYADSVKG	33	DLSSGAYYYYGMDV
20	GDSYFWS	27	RIYGRGTTNYNRVFGS	34	DKGSEYSYFDP
21	RYAIS	28	GIIPPFPGVNYAQKFQG	35	VAYDGGGYNNIPKIYYYSYMDV

CDR's Light Chain

SEQ ID NO:	CDR1	SEQ ID NO:	CDR2	SEQ ID NO:	CDR3
36	KSSQSVFYTSNNKNYLA	43	WASTRES	50	QQYYDSYT
37	RASQGISSYLA	44	AASTLQS	51	QQLNSYPLT
38	RASQSVSSSYLA	45	GASSRAT	52	QQYGSSPRT
39	KSSQSVFYTSNNKNYLA	46	WASTRES	53	QQYYDSYT
40	RASQSVSSSYLA	47	GASSRAT	54	QQYDNPVDT
41	RASQSVSSSYLA	48	GASSRAT	55	QQYGTSPPL
42	RASQSVSSSYLA	49	GASSRAT	56	QQYGSSPRT

FIG. 4A

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Framework Regions, Heavy Chain

SEQ ID	FR1	SEQ ID	FR2
NO:		NO:	
57	GGGVVQPGRSCLKLSAASGFTFS	64	WVRQAPGKGLEWVA
58	.....AW..LR...V.....	64	.....
59	.....R.....	64	.....
60	GAEVKPKGTSVRISCRASGNTFT	65	WVRQAPGQGLQWMG
61	GGGLVQPGGSLRLSCATSGFIFN	66	WVRQAPGKGLEWVS
62	GPLVLRPSQTLTLTCPVSPGSIK	67	WVRQPVGKGLEWIG
63	GAEVKKPGSSVKVSCRASGGTFS	68	WVRQAPGQGLEWNG
SEQ ID	FR3	SEQ ID	FR4
NO:		NO:	
69	RFTISKDNSKNTLYLQMNSLRIDDTAVYYCAI	76	WGQGTLLVTVSS
70	.....R.....LS...PE.....TN	76	.....
71	.....VE.....	76	.....
72	RVSLTRDRSSNTVFLELSGLTEEDTALYFCAR	77	WGQGTVVTVSS
73	RFTISRDN SKNTAF LR MN SQRAEDTAVYYCAK	78	WGQGTTVTVSS
74	RVSM SVDM SR SQFFLELRDVTAA DTAVYYCAR	79	WGQGIVVNVS
75	RVITITADDSTNTAYMGLSSLRSGDTAVYYCAR	80	WGKGTTTVTVSS

FIG. 4B

TITLE: AUTOANT DIES TO GLUCOSE-6-PHOSPHAT. SOMERASE AND THEIR  
 PARTICIPATION IN AUTOIMMUNE DISEASE  
 INVENTORS NAME: Henrik Ditzel et al.  
 SERIAL NO.: 09/828,708

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Framework Regions, Light Chain

SEQ ID NO:	FR1	SEQ ID NO:	FR2
81	PDSLAVSLGERATINC	88	WYQQKPGQPPKLLIY
82	PSFLSASVGDRTTTC	89	WYQLKPGKAPKLLIY
83	PGTSLSPGERATLSC	90	WYQQKPGQAPRLLIY
84	PDSLAVSLGERATINC	91	WYQQKPGQPPKLLIY
85	PGTSLSPGEGATLSC	92	WYQQRPGQAPRLLIY
86	PGTSLSPGEGATLSC	93	WYQQKPGQAPRLLIY
87	PGTSLSPGERVTLSC	94	WYQQKPGQAPRLLIY
SEQ ID NO:	FR3	SEQ ID NO:	FR4
95	GVPDRFSGSGTDFTLTISLQAEDVAVYYC	102	FGQGTKLEIKRTVA
96	GVPSRFSGSGTEFTLTISLQPEDFATYYC	103	FGGGAKEVGIRRTVA
97	GIPDRFSGSGTDFTLTISRLEPEDFAVYYC	104	FGQGTKVEIKRTVA
98	GVPDRFSGSGTDFTLTISLQAEDVAVYYC	105	FGQGTKLEIKRTVA
99	GIPDRFSGSGTDFSTISLQPEDTGTYYC	106	FGQGTRLEIKRTVA
100	GIPDRFSGSGTDFTLTISRLEPEDFAVYYC	107	FGQGTRLEIKRTVA
101	GIPDRFSGSGTDFTLTISRLEPEDFAVYYC	108	FGQGTKVEIKRTVA

FIG. 4B Cont'd

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LIGHT CHAIN NUCLEOTIDE SEQUENCE OF ANTI-GPI ANTIBODIES

A4 - SEQ ID NO:112

CCAGACTCCCTGGCTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCAGCCAGAGTGTTTTACACTTCCACAATAA  
GAACTACTTAGCTTGGTACCAGCAGAAACCAGGCCAGCTCCTAAGTTGCTCATTTACTGGGCATCCACCCGGGAATCCGGGGTCC  
CTGACCGATTACGTGGCAGCGGGTCTGGGACAGATTTCATCTCACCATCAGCAGCCTGCAAGCTGAAGATGTGGCAGTTTATTAC  
TGTCAGCAATATTATGATTCTGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAACGAACCTGTGGCT

D2 - SEQ ID NO:113

CCATCCTTCCCTGTCTGTAGGAGACAGAGTCACCATCACTTGCCGGGCCAGTCAAGGCATTAGCAGTTATTTAGCCTGGTAT  
CAGCTAAACCCGGGAAAGCCCTAAGCTCCTGATCTATGCTGCATCCACTTTGCCAAAGTGGGTCCCATCAAGTTTCAGCGGCAG  
TGGATCTGGGACAGAAATTCATCTCACAATAAGCAGCCTGCAGCCTGAAGATTITGCAACTTATTACTGTCAACAGCTTAATAGTT  
ACCTCTCACTTTCCGGGAGGGGCCAAGGTGGGATCAGACGAACTGTGGCT

D121 - SEQ ID NO:114

CCAGGCACCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCCTCTCTGTCAGGGCCAGTCAGAGTGTAGCAGCAGCTACITAGCCTG  
GTACCAGCAGAAACCTGGCCAGGCTCCAGGCTCCTCATATGTCATCCAGCGGCCACTGGCATCCAGACAGGTTCAGTG  
GCAGTGGTCTGGGACAGACTTCATCTCACCATCAGCAGACTGGAGCCTGAAGATTTTGCAAGTGTATTACTGTGTCAGCAGTATGGT  
AGCTCACCTCGGACGTTCCGGCCAAAGGGACCAAGGTGGAAATCAACGAACTGTGGCT

B2 - SEQ ID NO:115

CCAGACTCCCTGGCTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCAGCCAGAGTGTTTTACACTTCCACAATAA  
GAACTACTTAGCTTGGTACCAGCAGAAACCAGGCCAGCTCCTAAGTTGCTCATTTACTGGGCATCCACCCGGGAATCCGGGGTCC  
CTGACCGATTACGTGGCAGCGGGTCTGGGACAGATTTCATCTCACCATCAGCAGCCTGCAAGCTGAAGATGTGGCAGTTTATTAC  
TGTCAGCAATATTATGATTCTGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAACGAACCTGTGGCT

FIG. 5A

D14 - SEQ ID NO:116

CCAGGCACCCTGTCTCTCCAGGGGAAGGAGCCACCCTCTCTCTGCAAGGCCAGTCAGAGTGTAGCAGCAGCTACCTAGCCTG  
GTATCAGCAGAGACCTGGCCAGGCTCCAGGCTCCTCATCTATGTGTCATCCAGAGGCCACCGGCATCCCAGACAGATTTCAGTG  
GAAGTGGATCTGGGACAGATTTCAGTTTCACCATCAGCAGTCTGCAGCCTGAAGATACTGGGACATATTACTGTCAACAATATGAT  
AATGTCCCTGACACTTTTGGCCAGGGACCAGGCTGGAGATCAACGAACTGTGGCT

D5 - SEQ ID NO:117

CCAGGCACCCTGTCTTGTCTCCAGGGGAAGGAGCCACCCTCTCTCTGCAAGGCCAGTCAGAGTGTAGCAGCAGCTACTTAGCCTG  
GTACCAGCAGAAACCTGGCCAGGCTCCAGGCTCCTCATCTATGTGTCATCCAGTAGGGCCACTGGCATCCAGACAGAGTTTCAGTG  
GCAGTGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGATTTGTCAGTGTATTACTGTCAGCAGTATGGT  
ACCTCACCCCTCTTCGGCCAGGGACACGACTGGAGATTAAACGAACTGTGGCT

A7 - SEQ ID NO:118

CCAGGCACCCTGTCTTGTCTCCAGGGGAAGAGTCACCTCTCTCTCTGCAAGGCCAGTCAGAGTGTAGCAGCAGTTACTTAGCCTG  
GTACCAGCAGAAACCTGGCCAGGCTCCAGGCTCCTCATCTATGTGTCATCCAGAGGCCACTGGCATCCCAGACAGAGTTTCAGTG  
GCAGTGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGCCTGAAGACTTTGTCAGTTTATTACTGTCAGCAGTATGGA  
AGCTCACCTCGGACGTTTCGGCCAGGGACCAAGGTGGAAATCAACGAACTGTGGCT

FIG. 5A Cont'd

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HEAVY CHAIN NUCLEOTIDE SEQUENCE OF ANTI-GPI ANTIBODIES

A4-H - SEQ ID NO:116

GAGGGTGGTCCAGCCTGGAGGTCCCTGAAACTCTCCTGTGCAGCCTCTGGATTACAAITTCAGTAGTCATGGCTCGCACTGGGTC  
CGCCAAAGCTCCAGGCAAGGGCTGGAGTGGGTGGCACTTTTGTCTGATGGAAGTAATAAATTCTATATAGAAATCCGTGAAGG  
GCCGATTACCAATCTCCAAGGACAATTCTAAGAACACACACTGTATCTGCAAAATGAACAGCCTGAGAATTGACGACACGGCTGTCTAT  
TACTGTGCGATTTCCTGTGTGGAACTACCGCTTTTAACTACTGGGGCCAGGGAACCCCTGGTCAACCGTCTCCTCA

D2-H - SEQ ID NO:117

GGCGTGGTCCAAAGCATGGAGGTCCCTAAGACTCTCCTGTGTAGCCTGTGGATTACCTTCAGTAGTCATACCATGCACCTGGGTCCG  
CCAGGCTCCAGGCAAGGGCTGGAGTGGGTGGCACTTATATCTATGATGGAAGTAATAAATACTATGCAGACTCCGTGAAGGGC  
CGATTACCAATCTCCAGAGACAATTCCAAGAACACGCTGTATCTGCAATTGAGCAGCCTAAGACCTGAGGACACGGCTGTCTATT  
TTGTACGAATTCCGAGGTGGAGCTACCGCTTTTGAATACTGGGGCCAGGGAACCCCTGGTCAACCGTCTCCTCAG

D121-H - SEQ ID NO:118

GGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAGACTTTTCCCTGTGCAGCCTCTGGATTCACTTCAGTTCCTATACTTTCCACTGG  
GTCCGCCAGGCTCCAGGCAAGGGCTGGAGTGGGTGGCACTTATATCATATGATGGAACAAGAAATACTACGCAGACTCCGTGA  
AGGCCGATTCAACCATCTCCAGAGACAATTCCAAGAACACTCTATATCTGCAAAATGAACAGCCTGAGAGTTGAGGACACGGCTGTT  
TATTACTGTGCGATTTCATAGTGGGAATAACCGCTTTTAACTACTGGGGCCAGGGAACCCCTGGTCAACCGTCTCCTC

FIG. 5B

B2-H - SEQ ID NO:119

GGGGCTGAGGGTGAGGAAGCCCGGACCTCCGTGAGGATCTCTTGAGGGCATCTGGAAACACCTTCACTGGCCACCATATTTCACTG  
GGTCCGCCAGGCCCTGGACAAAGGCTTCAGTGGATGGGAAGAAATCAACCCGACTGGCGGCGTTAGTCTCGCACAGAGTTTC  
CAGGACAGAGTCAAGCCTGACCCAGGACAGGTCGTCCAAATACAGTCTTCTTGAACTGAGCGGCTCACGGAGGAGACACGGCCT  
TATAATTTCTGTGCGAGGCCCGGATTTAACATGATCCGGGAACCTCTTGACCTCTGGGGCCAGGGACAGTGGTCACCGTCTCCTCA

D14-H - SEQ ID NO:120

GGGGAGGCTTGGTACAGCCTGGGGGTCCCTGAGACTCTCCTGTGCAACCTCTGGATTTCATCTTTAAACAGCTATGCCATGAACCTG  
GGTCCGCCAGGCTCCAGGGAAGGGCTTGAAGTGGTCTCACGTATTAGTGGAATAGTGGAAGCACATTTCTACGCAGACTCCGTG  
AAGGCGGTTTCAACCATCTCCAGAGACAATTCOAAGAACACGGGTTTCTGCGAATGAACAGCCAGAGAGCCGAAGACACGGGCGG  
TTTATTACTGTGCGAAAGATCTGTGAGTGGTGTCATACTACTACGGGATGGACGTCTGGGGCCAAAGGACCAACCGTCAACCGTC  
TCCTCA

D5-H - SEQ ID NO:121

GGCCCCAGGATTGGTGAGGCCATCACAGACCCCTATCCCTCACCTGCACCTGTCTCTCAGGCTCCATTAAAGGTGATAGTTACTTCTGG  
AGCTGGTCCGTAGCCCGTAGGGAAGGACTGGAGTGGATAGGGCGTAATCTACGGCAGAGGGAATACCAATTACAACCGTGT  
TCGGGAGTCGAGTCAGTATGTCAAGTGGACATGTCCAGGAGTCAATTTCTTGGAATTGAGAGATGTGACCGCCGACACACGGCC  
GTCTATTACTGTGCGAGAGACAAGGGGTCCGAATACTCCTACTTTGACCCCTGGGCGCAGGGAATAGTGGTCAACGTCCTCTCA

FIG. 5B Cont'd



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SERIAL NO.: 09/828,708

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A7-H - SEQ ID NO:122

GGGCTGAGGTGAAGAAGCCTGGGTCCTCGGTGAAGTCTCCTGCAGGGCTTCTGGAGGCACATTCAGCAGATATGCTA  
TCAGCTGGGTGCGACAGGCCCTGGACAAAGGCTTGAGTGGATGGAGGGATCATCCCTCCCTTTGGTCCAGTAAACT  
ACGCACAGAAAGTTCCAGGGCAGAGTCACGATTACCGCGGACGATTCCACGACACAGCCTACATGGGTCTGAGCAGCC  
TGAGATCTGGGGACACGGCCGTGTATTACTGCGGAGAGTGGCCTATGATGCTAGTGGCTATTACAAACAATATCCCAA  
AGATCTACTACTCCTACATGGACGTCTGTGGGGCAAGGGACCCACCGTCACCGTGTCTCAGC

FIG. 5B Cont'd

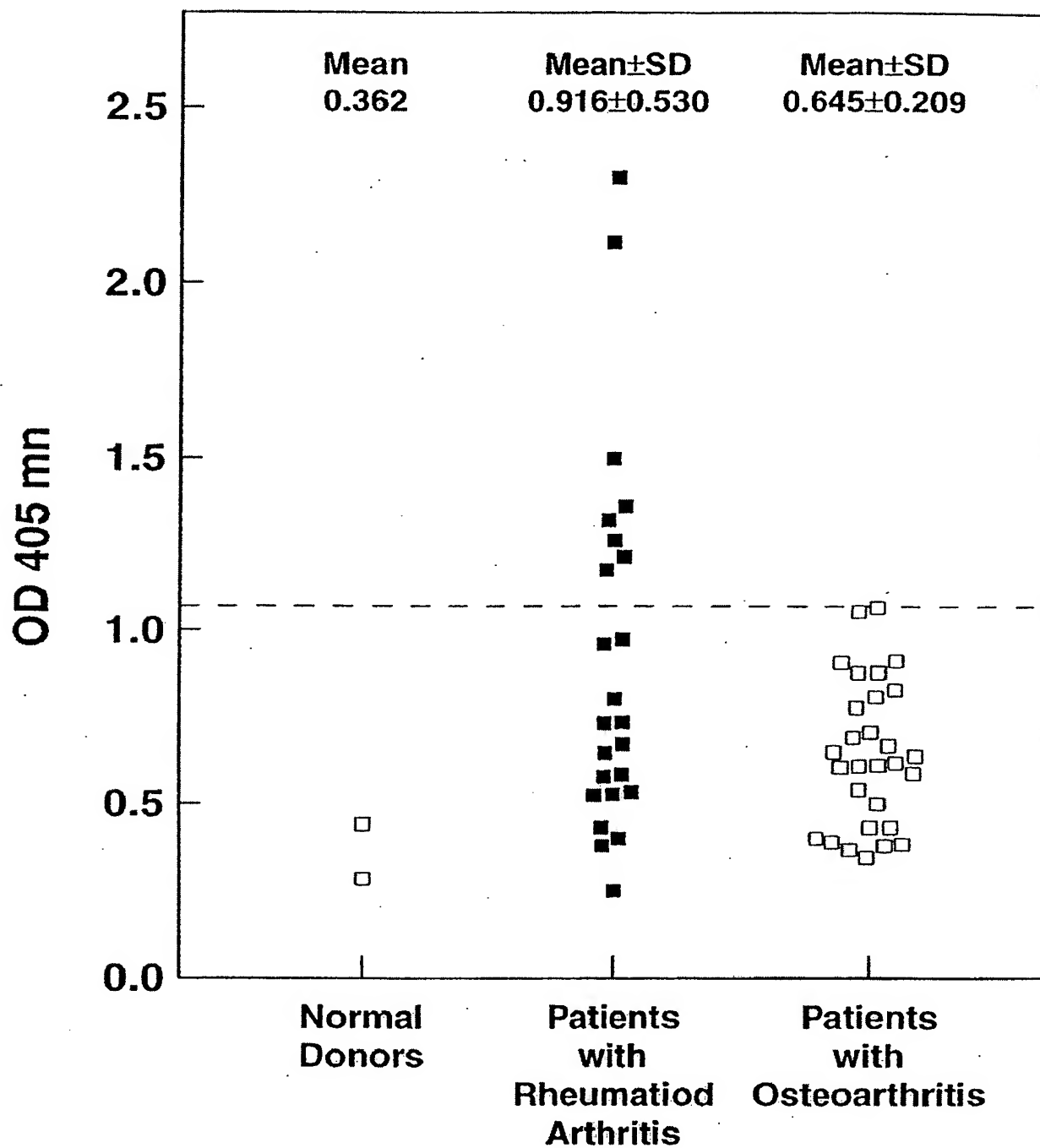


FIG. 6

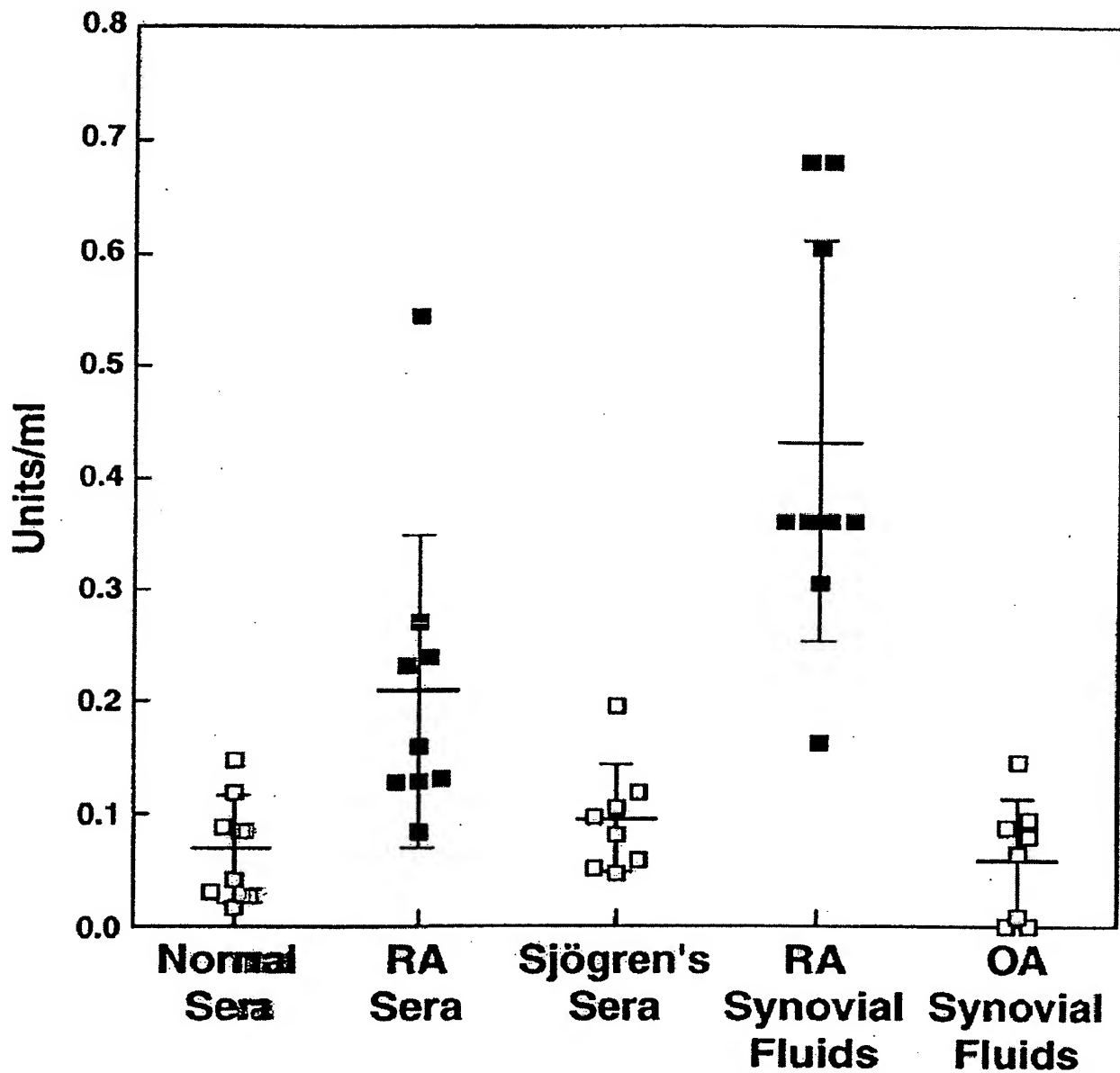


FIG. 7

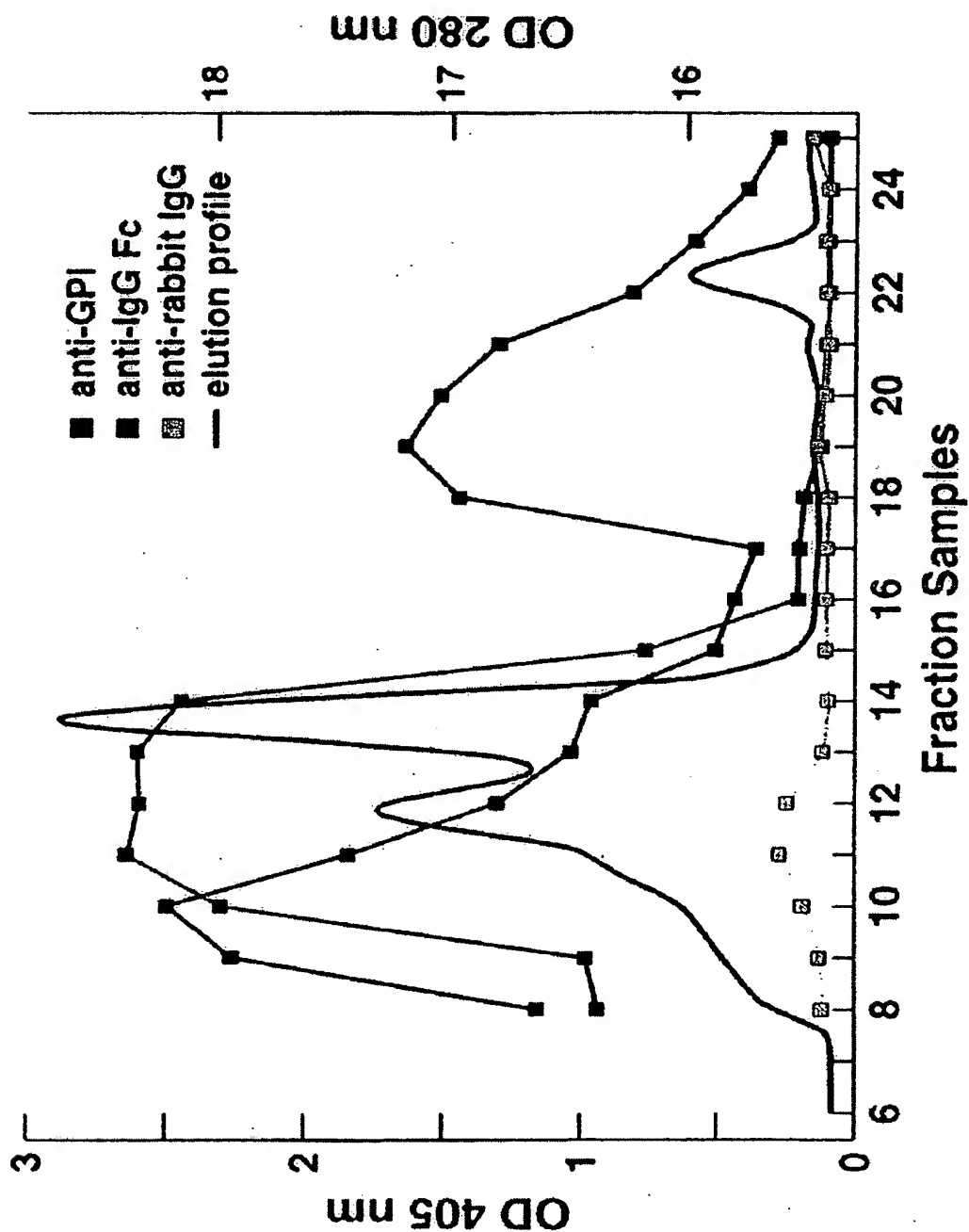


FIG. 8A

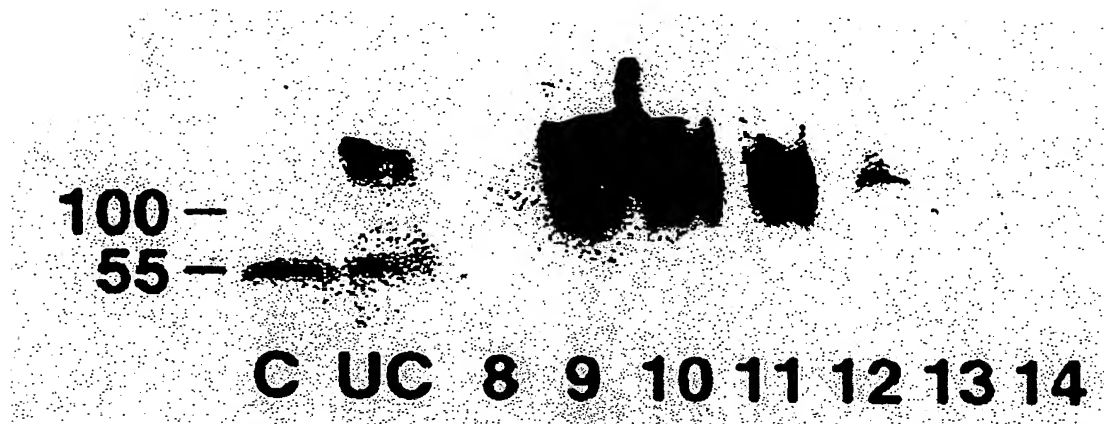


FIG. 8B

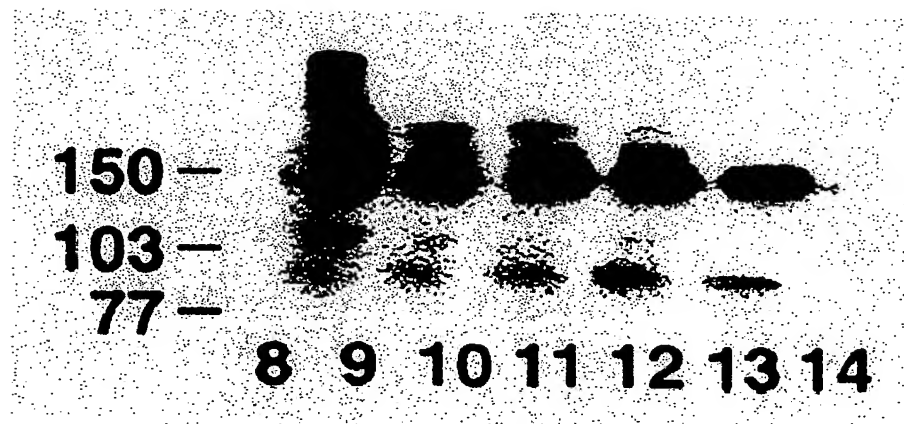


FIG. 8C

TITLE: AUTOANTIBODIES TO GLUCOSE-6-PHOSPHATE ISOMERASE AND THEIR  
PARTICIPATION IN AUTOIMMUNE DISEASE  
INVENTORS NAME: Henrik Ditzel et al.  
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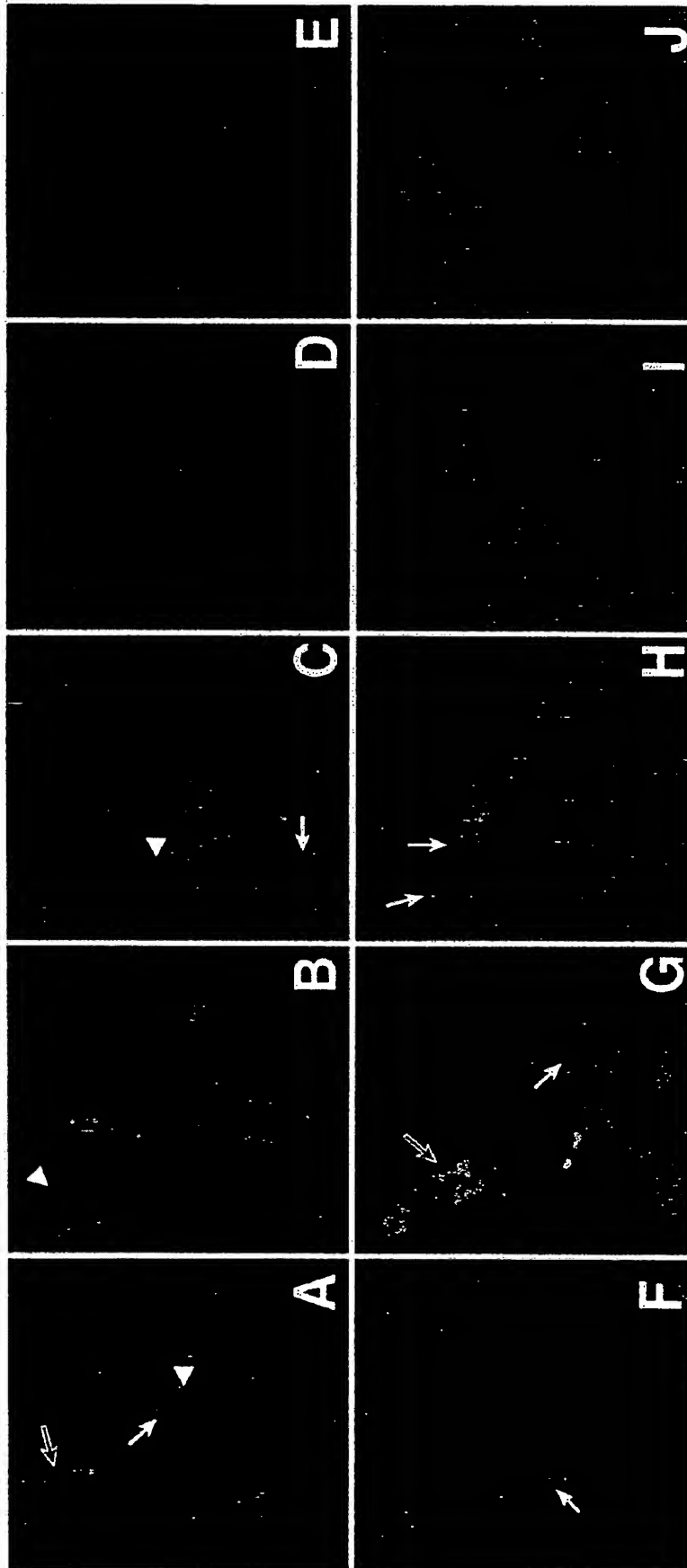


FIG. 9